EWM12U242418-R2
EWM12U242424-R2
EWM12U242430-R2
EWM20U362418-R2
EWM20U362424-R2
EWM20U362430-R2
EWM20U362430-R2
EWM26U482418-R2
EWM26U482424-R2
EWM26U482430-R2
EWM12UMFD-R2
EWM20UMFD-R2
EWM26UMFD-R2
EWM12URK-R2
EWM20URK-R2
EWM26URK-R2
EWM45DAB-R2
EWM90DAB-R2
EWM1U6SB-R2

Elite™ Wallmount Cabinet User's Manual

Fully assembled, ready-to-use wallmount cabinets.

Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746
Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: www.blackbox.com • E-mail: info@blackbox.com

Trademarks Used in this Manual

Black Box and the Double Diamond logo are registered trademarks, and Elite is a trademark, of BB Technologies, Inc.

PLEXIGLAS is a registered trademark of Roehm GmbH & CO.

VELCRO is a registered trademark of Velcro Industries B.V.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

We're here to help! If you have any questions about your application
or our products, contact Black Box Tech Support at **724-746-5500**
or go to **blackbox.com** and click on "Talk to Black Box."
You'll be live with one of our technical experts in less than 60 seconds.

Table of Contents

Preface 4
Safety 4
Safety Symbols Used in this Manual 4
Safety Considerations 4

1. Specifications 5
1.1 Size 5
1.2 General 5

2. Overview 8
2.1 Introduction 8
2.2 Features 8
2.3 What's Included 8
2.4 Optional Accessories 8

3. Mounting Instructions 9
3.1 Receiving, Unpacking, and Removing the Elite Wallmount Enclosure from the Pallet 9
3.2 Wood Studded Wall 9
3.3 Loading Equipment 10
3.4 Power 10
3.5 Protective Grounding 10
3.5.1 Connecting the Main Protective Grouding Stud to the Dedicated Branch Ground 10
3.5.2 Connecting the Main Protective Grounding Stud to the Protective Bonding Conductors 10

4. Operation 11
4.1 Operating the Door 11
4.2 Removing or Installing a Door 11
4.3 Reversing a Door 11
4.4 Adjusting the Rails 12

5. Optional Accessories Drawings 13

Preface

This manual is provided to prevent service personnel from committing an act that results in the risk of fire, electric shock, or injury to persons. Only trained service personnel should receive, unpack, and assemble the Elite Wallmount Cabinet. In addition, only trained service personnel should install equipment in enclosures.

Safety

Safety Symbols Used in this Manual

This manual provides general safety guidelines to be observed during installation, operation, and maintenance of the Elite Wallmount Cabinet.

WARNING: Failure to follow directions in the warning could result in injury to persons or loss of life.

CAUTION: Failure to follow directions in the caution could result in damage to equipment or storage data.

Safety Considerations

WARNING: Improper handling and use of the Elite Wallmount Cabinet could result in equipment damage, serious injury, or possible death.

Only trained service personnel should be used to remove the enclosure from the pallet. Also be sure you have a sufficient number of service personnel. Do not attempt to move enclosures by yourself.

Only UL® Listed ITE units should be installed inside the Elite Wallmount Cabinet.

Be sure to read and follow all individual manufacturer equipment manuals for safety and installation instructions.

The Elite Wallmount Cabinet was not evaluated as a fire enclosure.

Proper spacing is required when installing electrical equipment to avoid electrical shock.

The ambient temperature operating range for the Elite Walllmount Cabinet and accessories is +50 to +95° F (+10 to +35° C).

The non-operating temperature is -4 to +140° F (-20 to +60° C).

1. Specifications

1.1 Size

Table 1-1 lists specifications for the cabinet shown in Figures 1-1 through 1-4.

Table 1-1. Cabinet size specifications.

Part Number	# of RUs	Height	Width	Depth	Door Width	Door Height	Exterior Depth	Exterior Depth w/Hinges	Exterior Height	Interior Depth*	Interior Height**	Interior Width***
EWM12U242418-R2	12	24"	24"	18"	21.125"	17.875"	18"	18.75"	24"	17.25"	23.8"	23.8"
EWM12U242424-R2	12	24"	24"	24"	21.125"	17.875"	24"	24.75"	24"	23.25"	23.8"	23.8"
EWM12U242430-R2	12	24"	24"	30"	21.125"	17.875"	30"	30.75"	24"	29.25"	23.8"	23.8"
EWM20U362418-R2	20	38.5"	24"	18"	21.125"	29.875"	18"	18.75"	38.5"	17.25"	35.8"	23.8"
EWM20U362424-R2	20	38.5"	24"	24"	21.125"	29.875"	24"	24.75"	38.5"	23.25"	35.8"	23.8"
EWM20U362430-R2	20	38.5"	24"	30"	21.125"	29.875"	30"	30.75"	38.5"	29.25"	35.8"	23.8"
EWM26U482418-R2	26	49"	24"	18"	21.125"	41.875"	18"	18.75"	49"	17.25"	47.8"	23.8"
EWM26U482424-R2	26	49"	24"	24"	21.125"	41.875"	24"	24.75"	49"	23.25"	47.8"	23.8"
EWM26U482430-R2	26	49"	24"	30"	21.125"	41.875"	30"	30.75"	49"	29.25"	47.8"	23.8"

*Back wall to front door

**Base to top

***Side wall to side wall

1.2 General

Construction:
Body: 14-gauge steel;
Doors: 16-gauge steel;
Rails: 12-gauge steel

Finish: Black powder coat

Grounding: Ground studs located on rear section, middle section, and door

PLEXIGLAS® Thickness: 0.2"(0.5 cm)

Distance to Rear Section at Maximum Rail Depth: 1.18"(0.48 cm)

Distance to Front Door at Maximum Rail Depth: 0.75" (1.91 cm)

Rail Type: 10-32 tapped

Minimum/Maximum Rail Depth:
18" Deep Cabinet: 0 to 7.56" (0 to 19.2 cm);
24" Deep Cabinet: 0 to 13.56" (0 to 34.4 cm);
30" Deep Cabinet: 0 to 19.56" (0 to 49.7 cm)

Weight Capacity:
24"H: 150 lb. (68 kg);
36"H: 250 lb. (114 kg);
48"H: 300 lb. (136 kg)

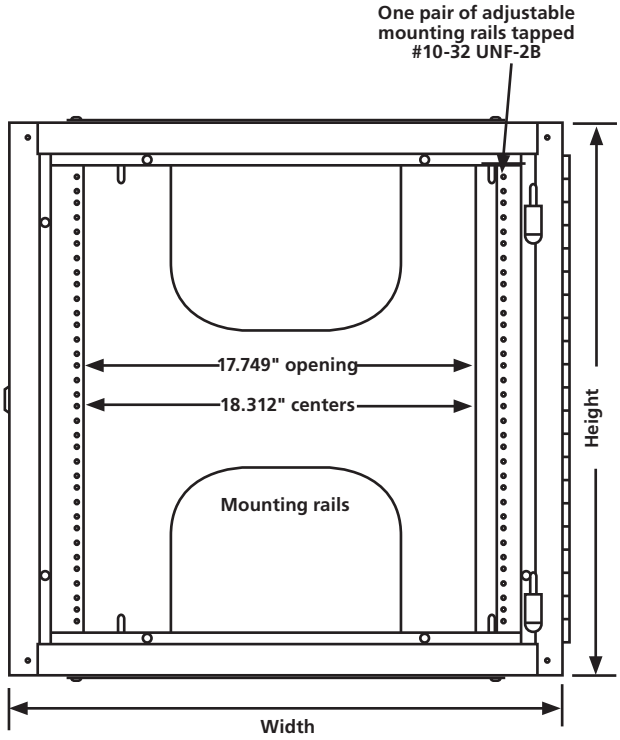

Figure 1-1. Front view (doors removed for clarity).

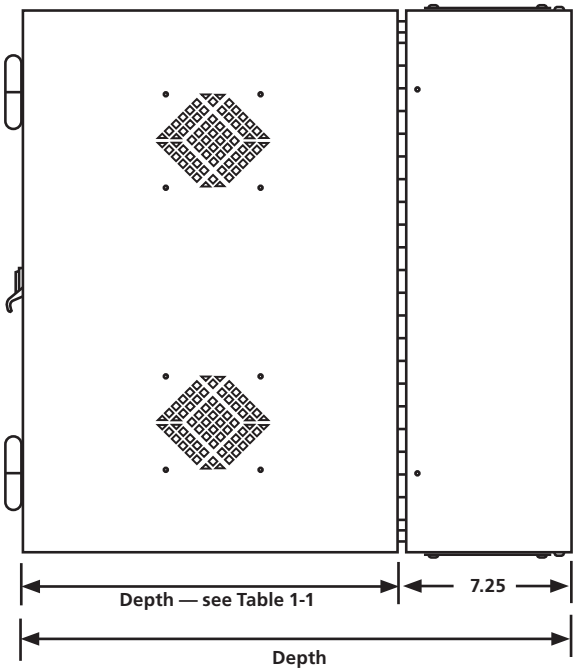

Figure 1-2. Right side view.

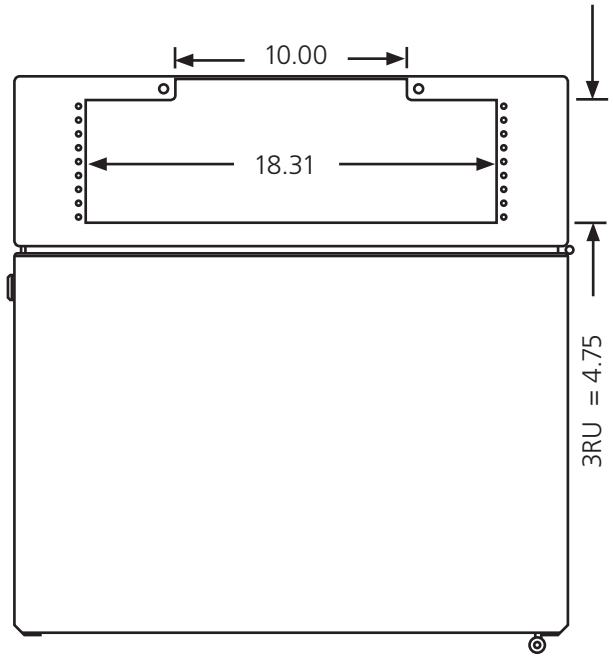

Figure 1-3. Top view.

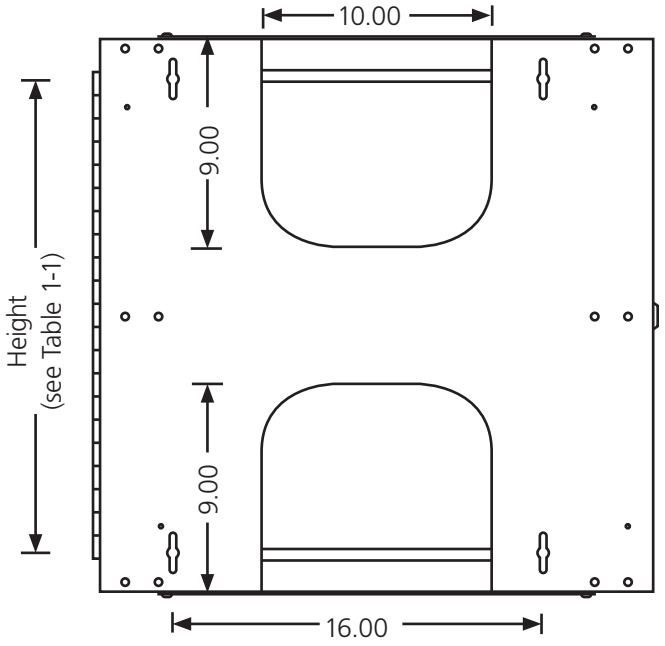

Figure 1-4. Back view.

2. Overview

2.1 Introduction

Elite Wallmount Cabinets are designed to securely hold 19" rackmount equipment, networking equipment, phone equipment, etc. in tight spaces or closets.

2.2 Features

- Large openings in the back panel enable easy installation of pre-wired equipment such as patch panels.
- Ships with one conduit panel on the top and one solid panel on the bottom.
- 3 RU Elite Cabinet accessories also fit the Elite Wallmount 3 RU openings, top and bottom.
- Welded steel frame.
- Includes one pair of 10-32 tapped rails.
- Additional rails are available for four-point mounting.
- Doors can be reversed to open left or right.
- Doors available in mesh and PLEXIGLAS.
- Double hinged for easy access to rear of equipment.
- Locking rear section.
- Accessories brackets provide additional moutning options in the rear section.

2.3 What's Included

Your package should include the following items. If anything is missing or damaged, please contact Black Box Technical Support at 724-746-5500 or info@blackbox.com.

- Fully assembled Elite Wallmount Cabinet
- (11) ground studs
- (30) 10-32 mounting screws
- (2) pairs of keys
- Mounting hardware for wood studded wall only
  - The 24" and 36"H cabinets include (4) ¼-10 x 2" lag bolts, (4) flat washers, and (4) locking washers.
  - The 48" cabinets include (6) ¼-10 x 2" lag bolts, (6) flat washers, and (6) locking washers.
- (1) pair of 10-32 mounting rails
- This user manual

2.4 Optional Accessories

- 3 RU Conduit Adapter Plate (ECP3U)
- 3 RU Brush Grommet Kit (ECBGK3U)
- 45-Degree Angle Bracket (EWM45DAB-R2)
- 90-Degree Angle Bracket (EWM90DAB-R2)
- 3 RU Waterfall Radius Bracket (ECW3U)
- 3 RU Gland Plate Kit (EC3UGP)
- 3 RU Filler Panel (RMTB03)
- Extra pair of rails for 24"H wallmount (EWM12URK-R2)
- Extra pair of rails for 36"H wallmount (EWM20URK-R2)
- Extra pair of rails for 48"H wallmount (EWM26URK-R2)
- 1 RU x 6"D standoff bracket for rear section (EWM1U6SB-R2)
- Fan (RMT373-R3)
- Fan (RMT373AE-R3)
- Vent Cover Plate (EWMDCP-R2

3. Mounting Instructions

3.1 Receiving, Unpacking, and Removing the Elite Wallmount Enclosure from the Pallet

Inspect for damage and report damage if there is damage before receiving. Refer to Section 2.3 for what's included in the package.

Unpack the enclosure by carefully removing the corrugated carton and corners. Avoid damaging the enclosure when removing packaging.

WARNING: Only trained service personnel should be used to remove the enclosure from the pallet. Also be sure you have a sufficient number of service personnel. Do not attempt to move enclosures by yourself.

WARNING: Be careful when moving enclosures before installation. Sudden stops and starts, excessive force, obstructed routes, and uneven floor surfaces may cause the enclosure to topple over.

3.2 Wood Studded Wall

Once the location on the wall has been determined, inspect the wall surface. The wall must be flat and square in the horizontal and vertical plane to ensure the Elite Wallmount Cabinet closes correctly. If the wall is not flat and square, you might need to use shims.

You can remove the rear section of the cabinet by removing the hinges. Mount the rear section to the wall using the included hardware or install two horizontal bolts in studs (DO NOT TIGHTEN!) using a level. Hang the rear section on the two bolts, install the lower two bolts (line up with a level) and tighten. Then tighten the upper two bolts.

WARNING: Improper handling and use of the Elite Wallmount Enclosure could result in equipment damage, serious injury, or possible death.

Masonry Wall Surface

For a masonry wall surface, the installer must provide the appropriate hardware.

3.3 Loading Equipment

WARNING: Only install equipment after the Elite Wallmount has been properly secured and mounted to the wall.

Maximum Load Capacity

Rated or maximum load capacity for the Elite Wallmount:

24"H = 150 pounds

36"H = 250 pounds

48"H = 300 pounds

3.4 Power

When using power distribution units (PDUs), each PDU should be connected to a committed branch circuit that is rated for the continuous load of all the equipment connected.

When not using a PDU, each piece of equipment should be connected to a dedicated branch circuit.

3.5 Protective Grounding

A main protective earthing stud and grounding studs are provided.

WARNING: To avoid injury to persons or loss of life, ground each enclosure individually to the dedicated branch circuit earthing ground.

3.5.1 Connecting Main Protective Grouding Stud to the Dedicated Branch Circuit Earthing Ground Conductor

Connect the dedicated branch circuit ground conductor to the main protective earthing stud located inside at the bottom rear of the enclosure chassis using a listed ring or closed-loop terminal.

3.5.2 Connecting Main Protective Grounding Stud to the Protective Bonding Conductors

Connect the rear door to the main protective grounding stud located inside at the bottom rear of the enclosure chassis using a listed ring or closed-loop terminal. Connect the front door to the grounding stud located inside at the bottom front of the enclosure chassis using a listed ring or closed-loop terminal.

4. Operation

4.1 Operating the Door

The Elite Enclosure is supplied with two locks (one for the front door and one to lock the middle section to the rear section). The middle section and rear section incorporate a grabber catch that enables the middle section to be held shut without locking.

4.2 Removing or Installing a Door

Open the door beyond 90°, remove the top half of the upper hinge, then grasp the door with both hands and carefully lift it upward. When the door is free of two hinge pins, pull the door away from the enclosure. To attach the door, align both door hinges to their respective hinge pins on the enclosure and slowly slide the door down until seated.

4.3 Reversing a Door

The front and rear doors are installed with two hinges as standard from Black Box. Removing the hinges enables you to reverse the door by flipping them over and reinstalling the hinges using the universal mounting holes. All the enclosure frames and doors can be hinged right- or left-hand. The handle can be reversed along with the hinging. See Figure 4-1.

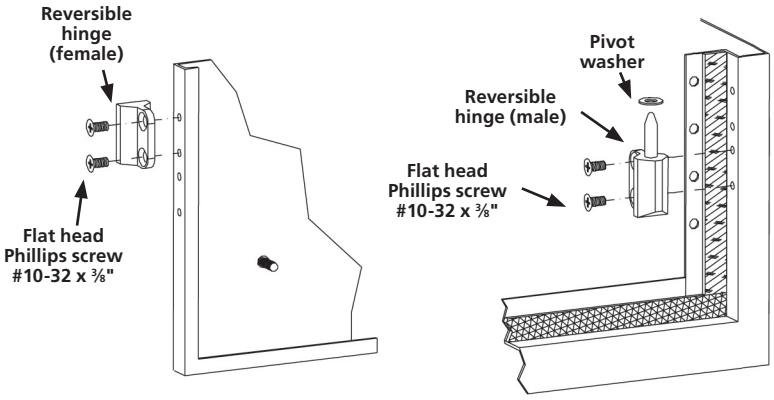
Reversible hinge (female)
Flat head Phillips screw #10-32 x ⅜"
Pivot washer
Reversible hinge (male)
Flat head Phillips screw #10-32 x ⅜"

Figure 4-1. Reversing a door.

4.4 Adjusting the Rails

Mounting Rails

One pair of 10-32 vertical mounting rails is installed in all Elite Wallmount Cabinets. Additional mounting rails are available as accessories.

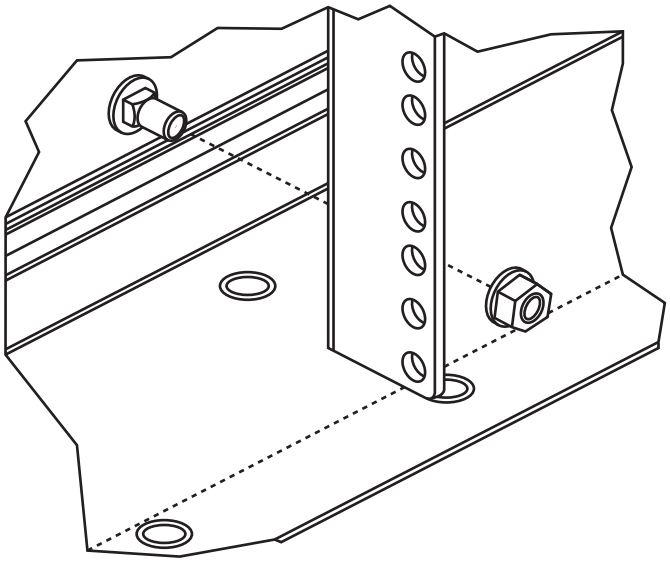

Figure 4-2. Adjusting the vertical mounting rails.

Rails are attached using a sliding nut and hex bolt. Loosen both top and bottom bolts, using an 11-mm socket set, then adjust the rails front to back.

5. Optional Accessories Drawings

Figures 5-1 through 5-5 illustrate some of the Elite Wallmount Cabinet's optional accessories.

Optional angle brackets attach to the back panel of the cabinet for mounting 19" rackmount equipment such as patch panels and PDUs.

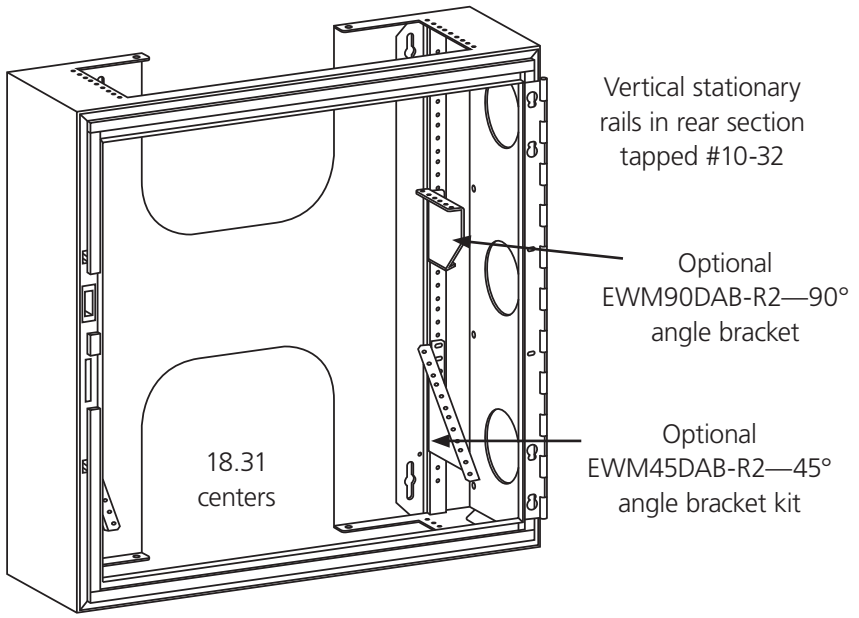
Vertical stationary rails in rear section tapped #10-32
Optional EWM90DAB-R2—90° angle bracket
Optional EWM45DAB-R2—45° angle bracket kit
18.31 centers

Figure 5-1. Angle bracket and angle bracket kit.

Use the brush grommet kit to protect the interior of the cabinet from dust and debris.

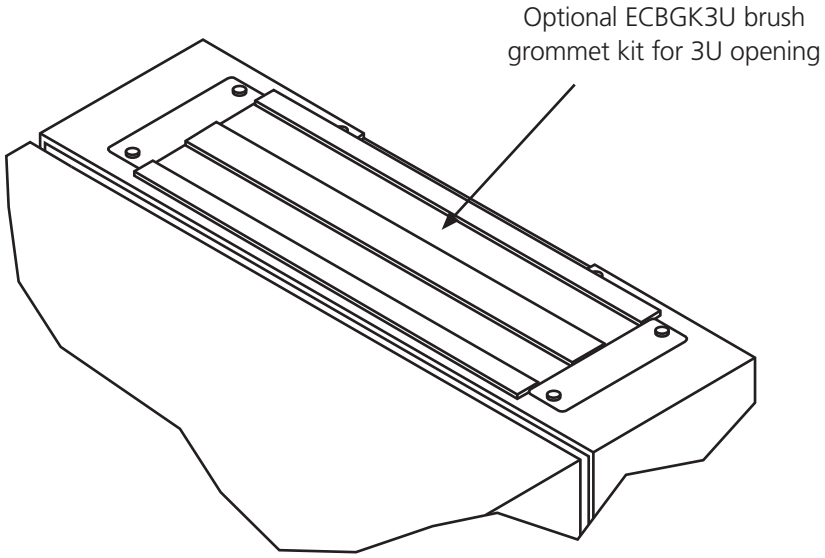

Figure 5-2. Optional ECBGK3U brush grommet kit for 3U opening.

Use the gland plate kit to close around cables to prevent unwanted airflow and keep dust and debris out.

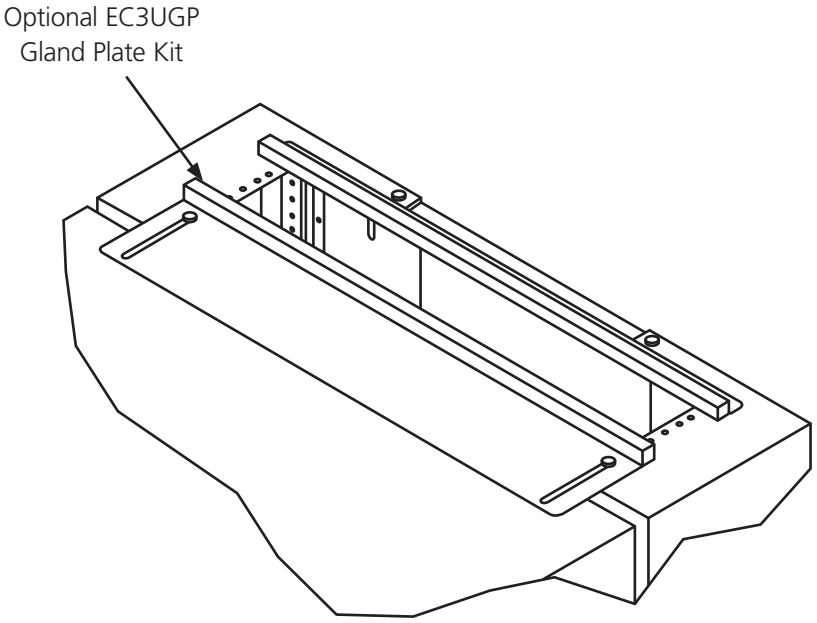

Figure 5-3. Optional EC3UGP Gland Plate Kit.

Use the waterfall bracket to maintain bend radius when routing cables into the cabinet.

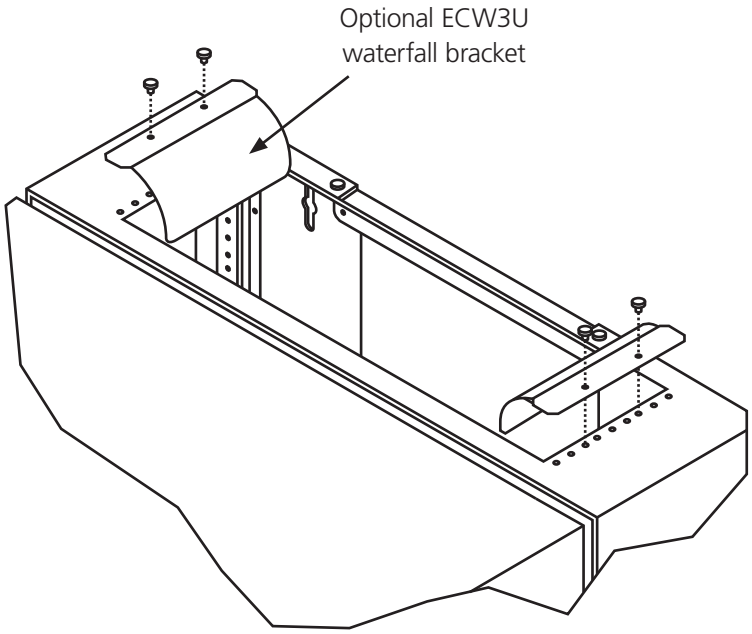

Figure 5-4. Optional ECW3U Waterfall Bracket.

Use the vent cover plate to keep dust and debris from entering the cabinet.

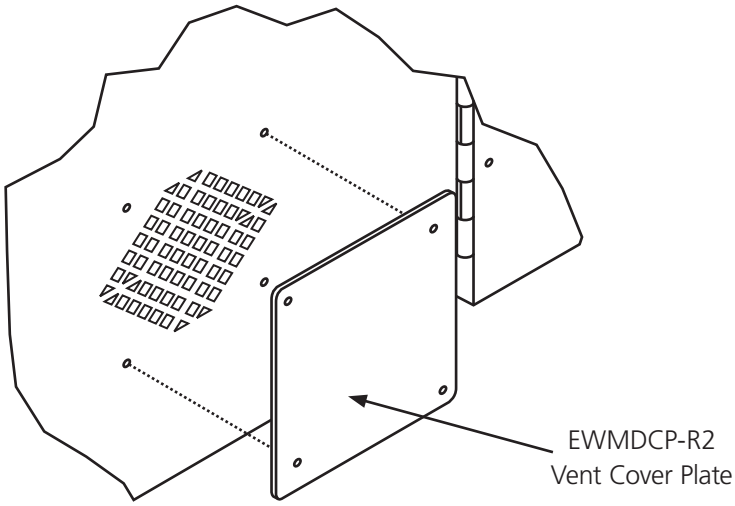

Figure 5-5. EWMDCP-R2 Vent Cover Plate.

Black Box Tech Support: FREE! Live. 24/7.

Great tech support is just 60 seconds away at 724-746-5500 or blackbox.com.

BLACK BOX®

About Black Box

Black Box Network Services is your source for an extensive range of networking and infrastructure products. You'll find everything from cabinets and racks and power and surge protection products to media converters and Ethernet switches all supported by free, live 24/7 Tech support available in 60 seconds or less.

© Copyright 2014. All rights reserved.

EWM12U242418-R2, rev. 4